

# State of Texas Assessments of Academic Readiness (STAAR®) Performance Level Descriptors Algebra II

## **Performance Level Descriptors**

The mathematical process skills describe ways in which students are expected to engage in the content. They are not assessed in isolation but are incorporated into questions that assess Algebra II content. The process skills focus on applying mathematics to solve problems, analyze mathematical relationships, and communicate mathematical ideas.

### Students achieving Level III: Advanced Academic Performance can

- Interpret restrictions on the domain and range of a function and its inverse (quadratic and square root, exponential and logarithmic)
- Analyze asymptotic behavior in the graph of a function
- Determine the reasonableness of solutions to equations and systems of equations in mathematical and real-world situations

# Students achieving Level II: Satisfactory Academic Performance can

- Add, subtract, multiply, and divide rational expressions
- Determine the domain and range of a function (square root, cubic, cube root, exponential, logarithmic, absolute value, and rational)
- Determine solutions to equations, inequalities, and systems of equations and/or inequalities in mathematical and realworld problems
- Formulate equations, inequalities, and systems of equations and/or inequalities to solve problems
- Identify attributes of a function from its graph
- Analyze the effects of parameter changes on the graph of a function
- Analyze situations modeled by linear, quadratic, and exponential functions to predict and make decisions and critical judgments

## Students achieving Level I: Unsatisfactory Academic Performance can

- Add, subtract, and multiply polynomials
- Determine the domain and range of a function (linear and quadratic)
- Identify the appropriate function (linear, quadratic, or exponential) that models the given data